OFFICE OF THE UNDER SECRETARY OF DEFENSE

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ACQUISITION AND TECHNOLOGY

DUSD(ES/CI)

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DEFENSE ENERGY PROGRAM POLICY MEMORANDUM (DEPPM) 94-1

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, LOGISTICS & ENVIRONMENT)
ASSISTANT SECRETARY OF THE NAVY (INSTALLATIONS & ENVIRONMENT)
ASSISTANT SECRETARY OF THE AIR FORCE (MANPOWER, RESERVE AFFAIRS, INSTALLATIONS & ENVIRONMENT)
DIRECTOR, DEFENSE LOGISTICS AGENCY
DIRECTOR, DEFENSE COMMISSARY AGENCY
DIRECTOR, NATIONAL SECURITY AGENCY
DIRECTOR, DEFENSE MAPPING AGENCY

SUBJECT : Participation in Public Utility Sponsored Energy Conservation and Demand Side Management (EC/DSM) Programs

Deputy Secretary of Defense Memorandum on "Defense Facilities Energy Management," March 13, 1991, and DEPPM 91-2, "Implementing Defense Energy Management Goals" requested Component installations to actively participate in EC/DSM programs when and where such programs are offered by public utilities. The Memoranda further assigned the Department of the Army lead responsibility, in coordination with the Military Departments and Defense Agencies, to develop an integrated strategy for all DOD components, within the service territory of each utility, to coordinate activity and maximize benefits.

Executive Order 12759 of April 17, 1991, directed each agency to review procedures to participate in demand side management programs offered by public utilities and remove any impediments to receiving and utilizing services, incentives, and rebates offered by those programs. The Energy Policy Act of 1992, Public Law 102-486, further directed agencies to take maximum advantage of such services provided by public utilities to reduce energy use and cost to the Government.

This memorandum, developed by the Defense Components with Army leadership, establishes the guidelines for participation in EC/DSM programs offered by or to be negotiated with public utilities. Specifically, the attachment provides guidance on:

- Entrance into agreements with utility companies for facility energy conservation audits, at no cost or obligation to the government, with such audits to be conducted either by the utility company or contractors selected and paid by them.

- Application for, and acceptance of, approved financial incentives, such as energy efficient equipment rebates or project feasibility study and implementation of cost sharing programs, offered by utility companies.

- Direct negotiation with utility companies or contractors approved and competitively selected by utilities for the installation of improved energy efficiency, demand or energy reduction equipment, where utility incentives cover a portion or the entire amount of implementation costs.

- Direct negotiation with utility companies for the development of EC/DSM programs not currently available.

- Development of an implementation plan to maximize the participation in such programs by all Component installations.

It remains Defense policy that all DoD installations actively investigate and participate in EC/DSM programs offered by their utility companies, when determined to be economically advantageous based on the life-cycle costs and benefits of the proposed measures. Since many such mutually beneficial programs are time sensitive, actions should be taken immediately by installations to contact their appropriate utilities contracting authority to coordinate participation wherever advantageous to the Federal Government.

Addressees will establish schedules and procedures for their organizations to implement EC/DSM programs using the guidance attached. Please forward a copy of your implementing guidance to this office within 90 days.

Sherri Wasserman Goodman
Deputy Under Secretary of Defense
(Environmental Security)

DoD

INTEGRATED STRATEGY FOR PARTICIPATION IN PUBLIC UTILITY SPONSORED ENERGY CONSERVATION

DEMAND SIDE MANAGEMENT PROGRAMS

1. Purpose: To establish a coordinated and integrated strategy for Defense Component participation in commercial utility companies' Energy Conservation and Demand Side Management (EC/DSM) programs. The objective of EC/DSM participation is to maximize energy and dollar savings.

2. Background: Increasing environmental compliance and mitigation costs and the high cost of constructing utility generation and transmission facilities are causing many utility regulators to permit and/or require regulated utility companies to offer rebates and financial incentives to their customers to reduce electricity or gas demand on the utility systems. Many unregulated public utility companies are also finding it financially advantageous to initiate demand reduction programs. Incentives vary from no-cost energy studies to major financial contributions for project accomplishment. The cost of these programs has been incorporated into the utility rate structure.

Section 2851 of Public Law 101-510, codified as 10 U.S.C. 2865, states that the Secretary of Defense shall permit and encourage Military Departments, Defense Agencies, and other Components of the Department of Defense (herein referred to as Components) to participate in programs conducted by any gas or electric utility for the management of electrical demand or for energy conservation.

In addition, section 2801 of Public Law 102-484 amended 10 U.S.C. 2865 to allow military installations to enter into agreements with gas or electric utilities to design and implement cost-effective demand and conservation incentive programs in order to address the requirements and circumstances of the installation. If such an agreement between the utility and installation provides for the utility to advance financing costs for the design or implementation of a program to be repaid by the United States, the cost of such advance may be recovered by the utility under terms no less favorable than those applicable to its most favored customer. Subject to availability of funds, any repayment of the costs of such advance shall be made from funds available for the purchase of utility services.

The National Energy Conservation Policy Act, as amended by Section 546 of the Energy Conservation Policy Act of 1992, Public Law 102-486, authorizes and encourages agencies to participate in programs generally available to utility customers conducted by gas, water, or electric utilities to increase energy efficiency, improve electricity demand management or for water conservation.

3. DEFENSE DEMAND SIDE MANAGEMENT SUBCOMMITTEE (DDSMS): A Defense Demand Side Management Subcommittee of the Defense Utilities Energy Coordinating Council

(DUECC), chaired by the Army, has been established. The initial members of the committee are listed in enclosure 1. As large consumers of utility energy services, DoD installations can potentially achieve significant savings through a coordinated participation in EC/DSM programs. Ensuring this coordination is the primary function of the Subcommittee.

The functions of this Subcommittee are to:

a. Coordinate and share pertinent information, and consolidate interests to maximize Defense installations' participation and benefits from EC/DSM.

b. Support the Assistant Deputy Under Secretary of Defense (Conservation & Installations) and the Defense Energy Conservation Committee.

c. Propose policy, including proposed changes in statutory guidelines and federal government procurement regulations, to remove barriers and increase benefits from participation in such programs.

d. Recommend procedures and standard methodologies for dealing with the regulatory, technical and business aspects of the energy industry that impact DoD interests.

e. Meet at the chair's call, but no less than once per year, and provide an annual report on the DoD wide participation in EC/DSM programs to ADUSD (CI).

f. Develop and at least annually update an implementation plan which provides detailed guidance and milestones for an EC/DSM program for DoD installations.

4. STRATEGY FOR PARTICIPATION IN EXISTING EC/DSM PROGRAMS:

a. Each Component will encourage its installations to take advantage of existing EC/DSM programs being offered, where these programs have been designed by the utility company, and made available to all customers in their specific rate classes. Examples of benefits offered through such programs include cash rebates for the installation of energy efficient light bulbs and controls to cycle air conditioners and water heaters, primarily to shift those loads towards periods of lesser utility demand.

Frequently, utilities provide free energy audits to identify actions that can be taken to reduce energy use and/or demand. Utility companies may also suggest the use of innovative technologies, such as thermal energy storage cooling systems, which may carry substantial rebates. Installations, through coordination with their utilities contracting authority, should take maximum advantage of such offerings, to the extent that the technology has been found to be technically sound and applicable to their specific requirements and conditions, and economically advantageous based on life-cycle analysis of costs and savings.

b. Components will maximize the use of funds available for operations and maintenance for program participation. Other sources of funding, such as Military Construction (MilCon), Energy Conservation Investment Program (ECIP), Energy Savings Performance Contracting (ESPC) and Third Party Contracting (TPC) should be used when appropriate.

c. When the utility company and the Government share the EC/DSM project cost, only the Government portion of the total cost will be budgeted for, as directed by higher authority. In order to reduce the budgeted cost, installations should work with utility companies to minimize the government's share.

d. Rebates are considered as a project cost reduction, i.e., an incentive provided by the utility company to encourage customer funding of energy conservation projects. Such rebates may be cash contributions applied directly toward project construction costs, or discounts applied to utility service invoices. When provided by the utility, rebates should be retained at the installation in the account that funded the project or activity leading to the rebate.

e. To accomplish work associated with EC/DSM projects when in conjunction with an energy savings performance contract arrangement, Components will assist installations in negotiating directly with the utility company. If the utility employs a competitively selected service contractor, the utility should be requested to provide a statement to the installation contracting officer assuring a competitive selection process was used. This action will expedite the direct negotiation process for EC/DSM projects between the utility company, installation, and the competitively selected utility contractor.

5. STRATEGY FOR CUSTOMIZED DSM INCENTIVE PROGRAMS: Existing EC/DSM programs are generally developed by utility companies for relatively small residential and commercial customers. DoD installations provide the utility with an opportunity to contract for large amounts of energy and demand reduction with a minimum of contracting effort and administrative expense. Lead services have been designated to negotiate customized EC/DSM incentive programs on behalf of all the military installations within the utility's service territory.

Generally, the Military Department having the largest consumption or billing from a particular utility company will take the lead in investigating DSM savings, analyzing implementation opportunities and negotiating customized programs for all DoD installations in the utility's service territory. The lead service coordinates interests of the Defense customers in a particular utility service area, and includes them during their negotiations with that utility. A tri-service coordinated list identifying assigned lead service responsibility is contained in enclosure 2.

In the event that a particular Component has initiated DSM negotiations or contracts prior to the designated lead agency's involvement, that initiating agency may continue with its activities. However, a representative of the "designated" lead agency will be invited to participate in all subsequent discussions and negotiations with the utility company and will become responsible for the coordination of additional EC/DSM activities in that territory.

Where regional Department of Energy (DOE) operations offices have taken the lead on rate case actions with utility companies, the Components will maintain close coordination with these DOE Offices on the EC/DSM programs and identify their point of contact to the DDSMS. By mutual agreement, DoD activities working with a lead DOE laboratory may select the laboratory as the coordinating agent for DoD installations as well.

Large reimbursable activities located on the installation, such as commissaries, interested in participating in EC/DSM programs must coordinate their participation with the host installation or lead service as appropriate, and benefit appropriately for their efforts.

Lead Service representatives for each utility service area will:

a. Con tact the local utility company to review existing and proposed EC/DSM programs for potential applications to military installations, This action will be pre-coordinated with other DoD installations in the area to assure that previous negotiations or acquisition related issues are considered. New programs should include no cost or low cost facility energy audits, assistance with analysis and design of energy and demand reduction opportunities, arrangements for the utility to provide up-front funding, arrangements for the utility to bill the government's share of EC/DSM program costs over time on the utility bill, arrangements for contractors, provisions for construction oversight, and assistance with verification of savings.

b. Propose new consolidated EC/DSM programs to the utility companies which would be beneficial to the serviced installations.

c. Encourage all military installations within the utility company's service territory to take prompt, aggressive action so that maximum program benefits can be achieved.

d. Ensure that all military installations within the utility company's service territory are fully informed regarding options available, potential savings, contracting methods, etc.

e. Encourage the utility company to provide maximum possible funding for EC/DSM projects by identifying advantages such as early reductions in utility demand and/or lower project administration costs.

f. Encourage the utility company to obtain, through an open competitive process, contractors who could install EC/DSM equipment for the utility's customers and provide assurance that a competitive selection process was used.

g. Assist utility companies in shaping their EC/DSM policies and programs during the formative process, including appropriate support and participation during EC/DSM hearings before state and/or public utility commissions.

h. Inform the Army, as EC/DSM Lead Component, of the life-cycle cost analysis, negotiations, completed projects, business analysis, and utility rate increases or decreases.

i. Invite other major Federal customers in the utility company's service territory to participate where appropriate.

6. OTHER ACTIONS:

a. The Army, as EC/DSM Lead Component, will maintain contact with various industry related agencies such as Edison Electric Institute (EEI), American Public Power Association (APPA), Electric Power Research Institute (EPRI), and National Association of Regulatory

Utilities Commissioners (NARUC) as well as the Department of Energy's Federal Energy Management Program Office to stay abreast of the latest technologies and opportunities in the EC/DSM field.

b. Each Component should develop and promulgate to their installations a detailed management plan for implementation of the EC/DSM program. A sample management plan is attached (Enclosure 3) for Components to use as a standard for content and detail.

c. The Army will publish and distribute program lessons learned information annually and will provide recommended updates to this strategy, including lead service assignments for EC/DSM activities. All Components will provide input to the DDSMS to assist in this effort.

d. The Components will present a semiannual EC/DSM program review to the chair of the DUECC to report progress, share implementation experience and to recommend program improvements.

e. The Army will develop a training course with emphasis on the EC/DSM program and applicable to all Components. The course will be offered at various locations to minimize travel costs. Components will encourage their installation personnel to participate in this course. The Army will establish reimbursement procedures for this training in coordination with the other Components.

f. To obtain the most benefits and reduce time it takes to process EC/DSM projects, Components will encourage their installations to be pro-active and provide them authority to participate in EC/DSM programs without higher level approval, to the maximum extent possible. As this participation could result in potential impact on existing or developing utility service contracts, or other utility energy acquisition programs (i.e., Defense Fuel Supply Center direct supply natural gas program), installations should be cautioned to be sensitive to such contract issues, particularly when entering into long term EC/DSM contracts, and to contact the appropriate utility procurement office within its Component for specific guidance in each instance and to ensure a coordinated Defense position within the utility's service territory.

g. Each Component will develop and maintain the following lists and submit them to the Army, as EC/DSM Lead Component, for use in EC/DSM program coordination.

1. List of all DoD installations within each utility company service area for which it has the lead responsibility.

2. Installation Points of Contact.

3. Installation energy usage, energy demands and associated costs.

MEMBERS OF THE DEFENSE DEMAND SIDE MANAGEMENT SUBCOMMITTEE (DDSMS)

Army: Mr. John Lanzarone, US Army Engineering and Housing Support Agency, Attn: CEHSC-FU-M, 703-704-3849

Navy: Mr. Joe Cloutier, Naval Facilities Engineering Command, Code 165R, 703-325-8183.

Air Force: Mr. Tom Gildersleeve, Air Force Civil Engineering Support Activity, Attn: AFCESA/ENE, 904-283-6356

Defense Logistic Agency: Mr. Dave Van Pernis, Attn: DLA/WIR, 703-274-4891

Ex-officio members:

Defense Fuel Supply Center: Mr. Mark K. Iden, Attn: DFSC-AF, 703-274-7421

DoE: Mr. Lou Harris, DoE Code CE44, 202-586-9794

Defense Utilities Energy Coordinating Council
Rate Intervention and Demand Side Management Responsibility

The following lists public utilities with designation of the lead Armed Service for purpose of rate intervention and demand side management (DSM). Regulatory bodies will be making determinations regarding DSM programs and costs. While Executive Order 12759 applies to all, no civilian Executive Agency has to address the special statutory concerns of 10 U.S.C. 2865 (applying to both gas & electric utilities), Therefore a "lead Armed Service" has been designated below, though the rate intervention responsibility has been shared from time to time with General Services Administration (GSA) or Department of Energy (DoE). Where a different Armed Service is the "lead Service" in different regulatory jurisdictions is indicated below. Listing does not. include water and sewer utilities to which DSM would not apply.

Where there has been some sharing of intervention interest among the Armed Services is indicated, also. The Army has handled all Federal Energy Regulatory Commission hearings for the Services.

	Lead Service		
	Rate Intervention		
Utility	Electric	Gas	DSM
Alabama Electric Corp	Air Force		Air Force
Alabama Gas Co	Army		Army
Alabama Power Co (AL & FERC)	Army		Army
Arizona Public Service Co	Navy		Navy
Arkansas-Louisiana Gas Co (OK)	Army		Army
Arkansas-Louisiana Gas Co (ARK)	Air Force		Air Force
Arkansas Power & Light Co	Air Force		Air Force
Atlanta Gas Light Co (GA)	Army		Army
Atlantic City Electric Co	Army		Army
Baltimore Gas & Electric *Co*	Army	Army	Army
Boston Gas Co	Navy		Navy
Boston Edison Co	Navy		Navy
Carolina Power & Light Co (NC)	Navy		Navy
Carolina Power & Light Co (SC)	Air Force		Air Force
Central Hudson Gas & Electric	Army	Army	Army
Central Illinois Public Serv	Air Force		Air Force
Central Maine Power Co	Navy		Navy
Central Power & Light Co (TX)	Navy		Navy
Central Tele & Utilities (FERC)	Army		Army
City of Austin, TX	Air Force		Air Force

Enclosure 2

Utility	Lead Service Rate Intervention Electric	Gas	DSM
City of Colorado Springs, CO	Air Force		Air Force
City of Jacksonville (FL)	Navy		Navy
City of San Antonio, TX	Air Force		Air Force
City of Tacoma, WA	Air Force		Army
Colorado Interstate Gas Co	Army		Army
Columbia Gas Co		Army	Army
Commonwealth Edison Co (IL)	Army		Navy
Connecticut Light &Power	Navy		Navy
Conowingo Power Co	Army		Army
Consolidated Edison (NY)	Army		Army
Consumer Power Co	Air Force	Army	Air Force
CP National Corp (CA)	Army		Army
Dayton Power & Light Co	Air Force		Air Force
Delmarva Power & Light Co	Air Force		Air Force
Detroit Edison Co	Army		Army
Duquesne Light Co	Army		
El Paso Electric Co (TX & NM)	Army		Army
Enstar Gas Co (Alaska)		Army	Army
Florida Power Corporation	Navy		Army
Florida Power & Light Co	Air Force		Navy
Frederick Gas Co (MD)		Army	Army
Gas Co of New Mexico		Air Force	Air Force
Georgia Power Co	Army		Army
Great Falls Gas Co	Air Force		Air Force
Gulf Power Co	Air Force		Air Force
Hartford Elec Light Co (CT)	Navy		Navy
Hawaiian Electric Co	Navy		Navy
Idaho Power Co	Air Force		Air Force
Illinois Power Co	Air Force		Air Force
Indiana Gas Co		Army	Army
Indianapolis Power & Light Co	Army		Army
Iowa Southern Utilities (FERC)	Army		Army
Iowa Illinois G&E	Army	Army	Army
Jersey Central Power & Light Co	Army(1)		Army
Kansas Power & Light Co	Army	Army	Army

Utility	Lead Service Rate Intervention Electric	Gas	DSM
Kansas Gas & Electric Co	Air Force (2)	Army	Air Force
Kauai Electric Co	Navy		Navy
Laciede Gas Co		Army	Army
Lone Star Gas Co		Air Force	Air Force
Louisiana Power & Light Co	Navy		Navy
Louisville Gas & Electric Co	Army	Army	Army
Maine Public Service Co	Air Force		Air Force
Maryland Natural Gas Co		Army	Army
Metropolitan Edison Co (PA)	Navy		Navy
Mississippi Power Co	Navy	Navy	Navy
Missouri Public Service Co	Air Force		Air Force
Montana Power Co	Air Force		Air Force
Montana Dakota Utilities, Inc	Air Force	Air Force	Air Force
Mountain Fuel Supply Co		Air Force	Air Force
Narragansett Electric Co	Navy		Navy
Nevada Power Co	Air Force		Air Force
New Orleans Public Service Co	Navy		Navy
New England Power Co	Army		Army
New York State Gas & Elec Co	Air Force	Air Force	Air Force
Newport Electric Co	Navy		Navy
Niagara Mohawk Power Co	Air Force		Air Force
North Carolina Natural Gas Co		Army	Army
Northern States Power Co (WI)		Army	Army
Northern States Power Co (ND)	Air Force	Air Force	Air Force
Oklahoma Gas & Electric	Air Force		Air Force
Oklahoma Natural Gas Co		Air Force	Air Force
Orange & Rockland Utilities, Co	Army		Army
Pacific Gas & Electric Co	Navy	Navy	Navy
Pennsylvania Electric Co	Army		Army
Pennsylvania Power & Light Co	Army		Army
Peoples Energy (IL)		Army	Army
Peoples Natural Gas Co (CO)		Air Force	Air Force
Philadelphia Electric Co	Navy		Navy
Piedmont Natural Gas *Co (SC)*		Air Force	Air Force
Potomac Edison Co	Army		Army

Utility	Lead Service Rate Intervention Electric	Gas	DSM
Potomac Elec Power Co (DC)	Army		Army
Potomac Elec Power Co (MD)	Army		Army
Provident Energy Inc (RI)		Navy	Navy
Public Service Co of Colorado	Air Force	Air Force	Air Force
Public Service Co of Indiana	Air Force		Air Force
Public Service Co of NH (NH)	Navy (3)		Navy
Public Service E & G Co (NJ)	Navy	Navy	Navy
Public Service Co of NM	Air Force		Air Force
Public Service Co of OK (FERC)	Army		Army
Puget Sound Power & Light Co	Navy		Navy
Sacramento Mun Utility Dist	Air Force		Air Force
San Diego Gas & Electric Co	Navy	Navy	Navy
Savannah Electric & Power Co	Army		Army
She-Me Power Corp	Army		Army
Sierra Pacific Power Co (NV)	Navy		Navy
Sierra Pacific Power Co (FERC)	Army		Army
South Carolina E&G (electric)	Navy		Navy
South Carolina E&G (gas)		Army	Army
South Jersey Industries		Army	Army
South Carolina Pub Svc Auth	Navy		Navy
Southern California Gas Co		Navy	Navy
Southern Cal Edison Co	Navy		Navy
Southern Union Gas Co (TX)		Army	Army
Southern Connecticut Gas Co		Navy	Navy
Southern Maryland Elec Co-op	Navy	Navy	
Southwest Gas Co (AZ)		Army	Army
Southwest Gas (Ca)		Navy	Navy
Southwest Gas (Nv)		Air Force	Air Force
Southwestern Pub Svc Co	Air Force		Air Force
Southwestern Gas & Elec (LA)	Air Force	Air Force	Air Force
Tampa Electric Co	Air Force		Air Force
Texas Utilities Elec Co	Air Force		Air Force
Tucson Elec Power Co	Army		
UGI Inc		Army	Army
Union Electric Co (MO)	Army		Army

Utility	Lead Service Rate Intervention Electric	Gas	DSM
United Cities Gas Co (VA)		Army	Army
United Cities Gas Co (GA)		Army	Army
Upper Peninsula Power Co	Air Force		Air Force
Utah P&L Utah (PacifiCorp)	Air Force		Air Force
Utah P&L (FERC)	Army		Army
Valero Gas Co		Air Force	Air Force
Virginia Elec & Power Co	Navy		Navy
Virginia Natural Gas		Army	Army
Washington Gas Light Co		Army	Army
West Penn Power Co	Army		Army
West Texas Utilities Co	Air Force		Air Force
West Florida Natural Gas		Air Force	Air Force
Wisconsin Power & Light Co	Army		Army

1. When Fort Dix closes, JCP&L becomes Air Force responsibility

2. Army will handle successor, Kansas Power & Light Co. after the merger of KG&E and KP&L

3. Navy handles PSNH (or successor from bankruptcy)

SAMPLE

MANAGEMENT PLAN

FOR

IMPLEMENTATION

OF

UTILITY SPONSORED

ENERGY CONSERVATION/DEMAND SIDE MANAGEMENT (EC/DSM)

PROGRAMS

Enclosure 3

FOREWORD

This sample management plan is structured to address the major Energy Conservation/Demand Side Management (EC/DSM) program elements: policy, organizational relationships, responsibilities, funding strategy, and procedures for implementing and managing EC/DSM within each Military Service and Defense Agency. The format of the plan is patterned after the Army's EC/DSM Plan. This sample establishes the standard for all Components in the development of their plans.

Comments relating to this document are welcome and should be forwarded to the Office of the Assistant Deputy Under Secretary of Defense (Conservation & Installations), through the Military Service/DDSMS representatives.

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CHAPTER 1

INTRODUCTION

1-1. PURPOSE. The purpose of this management plan is to establish organizational relationships, responsibilities, funding strategy, and procedures for implementing and managing utility sponsored Energy Conservation/Demand Side Management (EC/DSM) programs.

1-2. APPLICABILITY. This management plan applies to all activities participating in the EC/DSM program.

1-3. REFERENCES.

a. Executive Order No. 12759, dated 17 April 1991.

b. Defense Energy Program Policy Memorandum (DEPPM) 91-2, dated 19 March 1991.

c. Public Law 101-510, Section 2851a, dated 5 November 1990.

d. Public Law 102-484, Section 2801d, dated 23 October 1992.

1-4. EXPLANATION OF ABBREVIATIONS. Abbreviations used in this document are listed in the glossary.

1-5. BACKGROUND.

a. Reference (a) ordered each Federal Agency to develop and implement a plan to meet the 1995 energy management goals of the National Energy Conservation Policy Act and "...by the year 2000 reduce overall energy use of Btu's per gross square foot of the Federal buildings it operates, taking into account utilization, by 20 percent from 1985 energy use levels, to the extent that these measures minimize life cycle costs and are cost-effective." Utilizing an EC/DSM initiative is one way for installations to reduce energy consumption and, thereby, contribute to the accomplishment of this goal. The Department of the Army has been designated as the lead agency for EC/DSM within the Department of Defense (DoD).

b. References (a) and (b) established EC/DSM as a method to contribute to the successful achievement of the assigned goals.

c. References (c) and (d) amended Title 10 United States Code with the addition of Section 2865, which encourages each military department "...to participate in programs conducted by any gas or electric company for the management of demand and for the conservation of energy."

1-6 EC/DSM FACTS

a. Participation in utility sponsored EC/DSM programs is designed to assist the installation in the management of its electric and gas demand and/or energy consumption.

b. EC/DSM saves the installation money by reducing energy/demand usage. An EC/DSM project can be any action that reduces energy cost and/or consumption at an installation, including conservation and demand management retrofits, self-generation and/or cogeneration, improved operation and maintenance, fuel switching, purchase of excess energy generated, utility rate structure evaluation, etc. Many utility companies have EC/DSM programs which provide a wide range of incentives to their customers. Incentives vary from energy studies to up-front financial contributions for projects.

c. Installations are authorized to: (1) enter into agreements with utility companies to obtain no-cost, no-obligation, facility energy conservation audits either directly or through their company-approved, competitively selected contractors, (2) apply for available incentives, especially financial, such as equipment rebates and cost-shared project feasibility studies, and (3) after coordinating with higher authority, enter into direct negotiation with utility companies to have them or their contractors install energy efficient, economically feasible equipment under agreements whereby utility company incentives cover all or some of the installation costs.

d. In some instances, entering into an EC/DSM program available from a local utility company can be as simple as modifying the existing utility service contract.

e. Entering into an EC/DSM program available from a local utility company has several advantages: (1) the installation avoids some or all of the cost associated with achieving energy reductions; (2) energy cost savings are generated, (3) the installation could receive direct rebates, either cash contributions applied directly toward project construction costs or discounts applied to utility service invoices; (4) the utility contractor can perform the work, thereby minimizing processing time and eliminating the need for the installation to employ additional manpower, and (5) the utility company will provide management and quality control of their employees or energy service contractors installing energy conservation equipment.

CHAPTER 2

ORGANIZATIONAL RESPONSIBILITIES AND RELATIONSHIPS

2-1. OFFICE OF THE ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE (CONSERVATION & INSTALLATIONS), (OASUSD(CI)). OADUSD(CI) shall provide formal tasking, program direction, and guidance to the Military Services and Defense Agencies with respect to program execution.

2-2. MILITARY SERVICES/DEFENSE AGENCIES (MS/DA). MS/DA shall:

a. Develop overall program implementation planning for EC/DSM activities within their organizations.

b. Serve as program proponent with overall authority and responsibility for implementing DoD EC/DSM program policy and goals.

c. Assign an EC/DSM program manager. Responsibilities include membership in the DDSMS, coordination of Component EC/DSM activities and use of the expertise available from the lead service. The Army Chief of Engineers has assigned the U.S. Army Engineer Division, Huntsville (USAEDH), as the DSM Technical Center of Expertise (TCX).

d. Submit input for congressionally mandated EC/DSM reports to OASD(L)EP.

e. Coordinate with other DOD components to establish a DOD-wide implementation strategy for EC/DSM.

f. Coordinate with the Defense Fuel Supply Center (DFSC) on any project that would affect the DFSC procurement of source supply natural gas.

2-3. The U.S. Army Engineer Division, Huntsville shall:

a. Function as the EC/DSM TCX for DoD.

b. Designate a representative to the DDSMS.

c. Provide technical and contracting support to the Military Services and Defense Agencies, as requested.

d. Prepare, maintain, and disseminate lessons-learned reports.

e. Collect, compile, report, and forward information to other interested agencies such as the regional intervening service.

f. Assist in negotiations with utilities on EC/DSM matters when requested by the responsible lead Service.

g. Develop an EC/DSM workshop for DoD Energy Managers.

2-4. MACOMS/MAJCOMS/MAJOR CIAIMANTS (Command authorities). Command authorities shall:

a. Provide operational oversight with respect to the preparation, technical rates selection, negotiation, and awarding of contracts for the acquisition of energy efficient services through the utility's EC/DSM program.

b. Establish EC/DSM procedures within their command.

c. Provide overall administration, coordination, and review of EC/DSM projects within their command.

d. Designate a POC for EC/DSM activities within their command.

e. Maintain liaison with state, municipal, or applicable regulatory bodies responsible for regulating utilities and maintain familiarity with prescribed policies, procedures, and rates for installations within their command.

2-5. INSTALLATIONS. Installations shall:

a. Execute their higher command authority EC/DSM program policies.

b. Determine what EC/DSM options are locally available and compatible with mission requirements and make recommendations to commanders.

c. Coordinate the involvement of the installation-level procurement personnel into the EC/DSM planning process.

d. Submit EC/DSM projects to their next level of command, as directed.

e. Compile data to facilitate EC/DSM project evaluation, such as utility consumption history, applicable utility rate schedules, building operating plans, maintenance and repair records, building energy audits, prior conservation measures and their effectiveness, planned facility usage changes and planned renovation or major repair projects that impact existing energy systems.

f. Execute contracts for the acquisition of energy efficient services following validation and approval of technical requirements by the proper technical authority.

g. Prepare and submit reports to their next level of command, as required.

h. Receive contractor-provided operation and maintenance (O&M) training in order to assume agreed-upon O&M responsibilities with respect to newly installed equipment.

i. Select personnel to attend formal training sessions related to the EC/DSM program.

j. Monitor all aspects of contractor performance, including a verification of savings.

k. Participate in the resolution of energy baseline modifications and contract changes as they are needed.

l. Administer and close out contracts and assume responsibility for equipment ownership, O&M, and repair.

m. Notify their next level of command of EC/DSM activities.

CHAPTER 3

MANAGEMENT AND EXECUTION

3-1. GENERAL PRINCIPLES. This management plan provides an approach for successfully implementing an EC/DSM program at the installation level. The principles underlying this approach are:

a. Strong command emphasis to highlight and strengthen general awareness of program objectives.

b. Program flexibility which permits approval authorization for projects based on installation capital expenditure rather than total project expenditure. Projects requiring only local approval will not require formal submission.

c. DoD EC/DSM program development by USAEHSC as DoD TCX.

d. Formal project submittal and screening procedures for approving candidate projects.

e. Technical instruction and follow-up support for program participants.

f. Active lesson-learned program to provide the latest feedback and guidance to program participants.

g. Program flexibility to allow for aggressive and innovative EC/DSM implementation.

h. Availability of an EC/DSM program training course.

3-2. CONCEPT AND APPROACH.

a. This management plan provides an effective procedure for awarding successful EC/DSM contracts. The probability of awarding successful EC/DSM contracts is improved by centralized program development and uniform contract format. However, individual installation initiative is the key element for success of the EC/DSM program.

b. An EC/DSM contract may be separate from, or a modification to an installation's existing utility contract. When extensive equipment or facility modification is contemplated requiring construction tradesmen to become involved, the installation may need to consider a separate contract. It is typically to the installation's benefit to preserve the existing indefinite-term contract(s). Contracting methodology must also be considered when evaluating the viability of an EC/DSM contract with a local utility. In some cases, Energy Savings Performance Contracting (ESPC) and Third Party Contracting (TPC) methods may be required by law. Additionally, the utility may have a business relationship with competitive energy

service companies which can provide both funding and necessary technical expertise.

c. The developmental path a project will take is dependent on the value of the capital expenditure by the Government. Capital expenditure is the amount that the Government will invest in the project. Small projects (those within local approval authority) will proceed in accordance with local procedures, while larger projects (those outside local approval authority) will be evaluated and approved by higher authority. A project that exceeds any of the criteria for local approval authority must be submitted for higher approval.

d. When installation funds contribute to the implementation of utility sponsored EC/DSM projects, the installation must assure that expenditures are consistent with funding priorities in regards to cost-effectiveness of all possible energy saving opportunities.

3-3. SEQUENCE OF EVENTS. The first step in taking advantage of utility EC/DSM programs is to identify the extent to which EC/DSM programs currently exist and if customized EC/DSM programs are under negotiation with the utility company for any DoD installations. Installations must then evaluate their findings and take action to participate immediately in an existing DSM program or consider using a customized EC/DSM approach. In cases where the utility needs to develop new EC/DSM programs, the development of such programs will start long before project identification, For the Government to take full advantage of EC/DSM programs provided by utilities, such programs must be structured with the Government's interest in mind. To obtain an acceptable EC/DSM customized incentive program, the lead service must negotiate with the utility company and participate as appropriate in corresponding utility rate case actions before the state Public Service Commission (PSC). This will allow the Government to propose customized EC/DSM projects to the utility in addition to the lighting and motor retrofits typically offered by utilities. The Government may also be able to obtain financing provided by the utility to fund some portion of the construction cost.

This negotiation process should begin as soon as possible. It is especially important to be involved with the utility company if it is in the process of preparing either an integrated resource plan or a petition for a rate increase. The lead service is responsible to ensure that customized incentive EC/DSM programs developed with the utility are applicable to all DoD agencies in the utilities' service areas. With the help of the intervening service, the Technical Center of Expertise, if requested, will assist with negotiations.

The major components of the EC/DSM implementation process are program awareness, analysis and approval (phase I), solicitation development and contract award (phase II), and contract administration (phase III). Specific activities which comprise the major components of the implementation process are discussedbelow. It should be understood that this discussion addresses the progression of a typical project within the EC/DSM program. Figure 3-1 shows the progress of a typical EC/DSM project. The overall sequence of events for implementing a EC/DSM project is presented in figure 3-2. It is envisioned that this will be an ongoing program and that implementation workshops will be provided as needed.

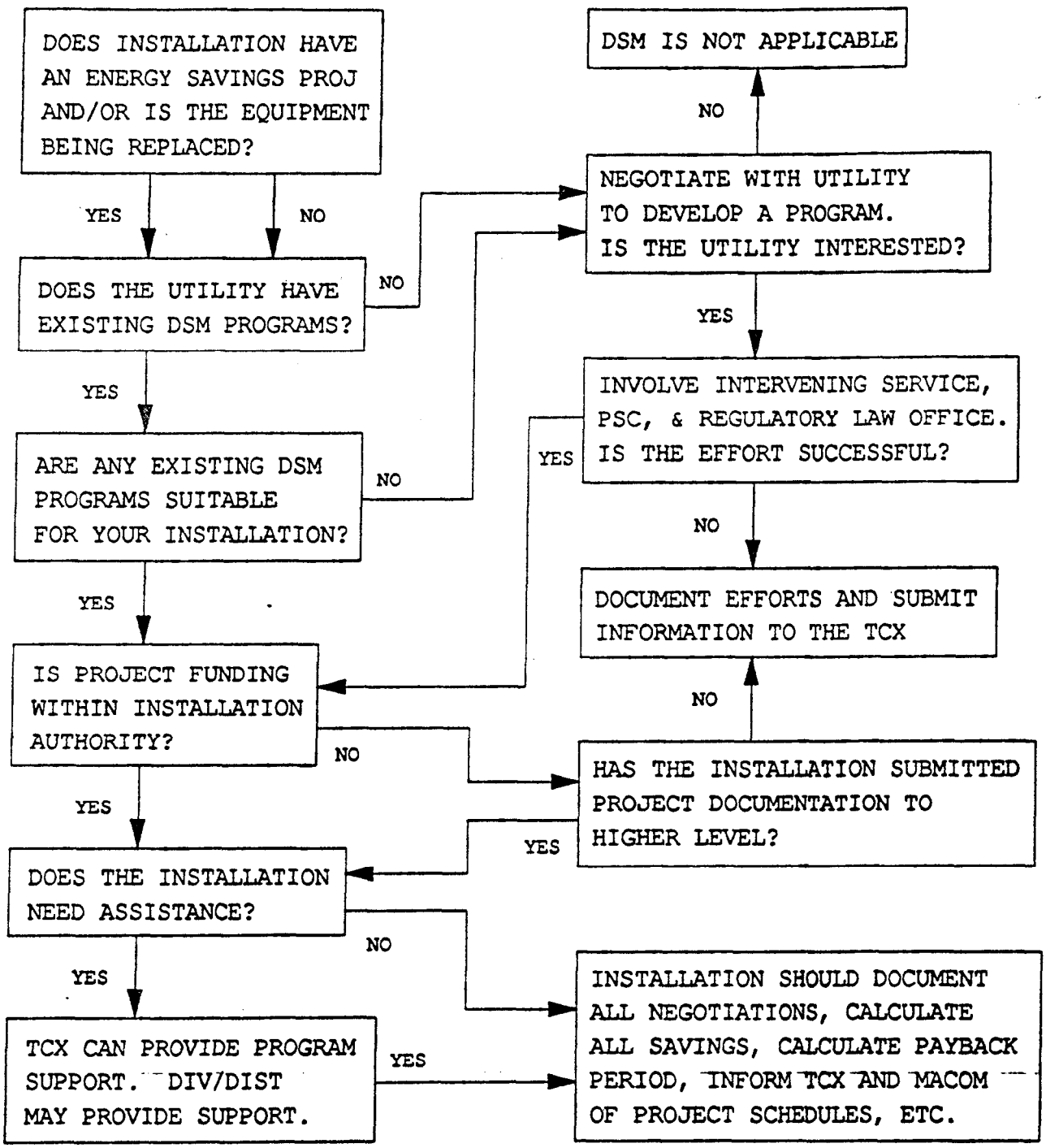

Figure 3-1 EC/DSM Project Flowchart

Program Awareness	o **AWARENESS** Policy Guidance Conferences/Meetings Publications o EC/DSM WORKSHOP Program policy and guidance Project documentation requirements Program schedule and plan reqmnts.
Phase I (Analysis and Approval)	o IMPLEMENTATION WORKSHOP **EC/DSM** program features Approval criteria Project documentation o ANALYSIS AND SUBMITTAL Feasibility study preparation Energy baseline preparation Economic analysis preparation Documentation preparation (DD Form 1391) Submittal to higher headquarters if required o PROJECT EVALUATION Technical review Economic/payback review o PROJECT APPROVAL/DISAPPROVAL IF REQUIRED Notification to proceed to phase II
Phase II (Solicitation Development and Contract Award)	o SOLICITATION DEVELOPMENT Preparation Evaluation Negotiation o CONTRACT AWARD
Phase III (Contract Administration)	o CONTRACT ADMINISTRATION MILCON O&M Payments

Figure 3-2. Sequence of Events for Implementing an EC/DSM Project

a. Program Awareness. Awareness and understanding of the EC/DSM program will be enhanced within the DoD through promulgation of policy guidance, emphasis at conferences/meetings and through the use of publications. The TCX will present workshops to familiarize DoD energy managers with the EC/DSM program. The objectives of this workshop will be to provide an understanding of the EC/DSM program, identify the criteria for approving proposed EC/DSM projects, and outline the project documentation and schedule requirements for submittal. This workshop will assist MACOM'S in providing supplementary guidance and direction to installations concerning the objectives of and requirements for participating in the EC/DSM program.

b. Analysis and Approval (Phase I).

(1) USAEDH will present to installation energy managers detailed workshops on implementing EC/DSM projects. Small projects identified by an installation will be evaluated by that installation. On larger projects, USAEDH or another similar agency will perform the evaluation on a reimbursable basis. In all cases, savings should be reported to the MACOM through appropriate channels.

(2) An installation with a large project will obtain the necessary higher-authority approval. The installation will identify the activity that will award and administer the contract and the information necessary for the solicitation statement of work. As TCX, USAEDH can review the documentation for technical and economic acceptability and recommend either approval or disapproval to requesting agency. If the TCX is not used, the installation's engineering support agency must perform the same evaluation. An approval will complete phase I of the process and will authorize the installation to proceed with solicitation development and contract award. If a proposed project is not approved, the installation may elect either to drop it or prepare additional information and resubmit the project.

(3) In many instances, a utility serves *more* than one Component in a geographic area. Where this situation exists, the installation must involve the lead service intervenor for the utility service territory in which it resides in the negotiation process.

c. Solicitation Development and Contract Award (Phase II).

After approval of large projects, per individual Component regulation, and appropriate local approval of small projects, preparation for contract award will commence. The contract-award process will consist of solicitation preparation, evaluation, clarification, and negotiation as necessary, and award USAEDH will be available to the MACOM/installation, as requested, for all aspects of project evaluation, contract preparation, and contract award on a reimbursable basis. If an installation elects to develop the contract itself or through its engineering support agency, USAEDH will be available to provide technical support and guidance. It should be noted that a separate contract action may not be necessary. Depending on the type of EC/DSM project offered, a modification to the existing utility contract may be possible. Coordination with the installation's utility procurement office and revision of the utility service contract will take place as part of phase II. Award of the EC/DSM contract completes phase II of the process.

d. Contract Administration (Phase III).

This phase will consist of contract administration and reporting. Contract administration and support responsibilities will continue throughout the life of the contract. The installation or its engineering support agency will pay invoices and monitor contractor performance. With the aid of the agency that prepared the contract, the installation or its engineering support agency will also participate in the resolution of energy baseline modifications and contract changes as they are needed.

CHAPTER 4

RESOURCE REQUIREMENTS

4-1. RESOURCE REQUIREMENTS.

a. A decision to initiate action on an EC/DSM program must be preceded by an identification of resources to accomplish the tasks resulting in an agreement with a utility company. Installations must:

- Identify the specific EC/DSM tasks to be accomplished.
- Identify the installation manpower and funding available to commit to the EC/DSM undertaking.
- Identify outside sources of expertise, to include reimbursable government agencies as well as any free services the utility may provide.
- Identify MACOM funding which may be obtained for the installation's EC/DSM program.
- Select the method of completion for each identified task based on the information found in the previous paragraphs.

CHAPTER 5

REPORTS

Executive Order No. 12759 of April 17, 1991, requires each Federal agency to report *on* their EC/DSM program to the Secretary, Department of Energy at least annually. The report will provide complete information on the procedures being used by the agency to establish a program of incentives for conserving and otherwise making more efficient use of energy as a result of entering into EC/DSM contracts. it will contain the number of EC/DSM contracts entered into by the agency, the energy cost savings resulting from such contracts, the use of the savings, and any problems encountered entering into the contracts. ADUSD(CI) will request each Military Service and Defense Agency, typically in the January timeframe, to provide information on their EC/DSM programs as part of the call for report input for the DoE Annual Report to Congress.

ENERGY CONSERVATION/DEMAND SIDE MANAGEMENT OPTIONS

The use of EC/DSM can reduce energy consumption and costs in addition to demand charges. Insulation, storm window and high efficiency lighting programs not only reduce on-peak kilowatt (kw) demand, but continue to reduce kwh consumption during non-peak periods. Insulation installed to shave electric summer peak under EC/DSM may reduce winter expense for space heating, using natural gas or fuel oil. Examples of the kinds of EC/DSM options available are as follows:

a. The "Georgia Power Good Cents Home" program, active since 1977, sets stringent standards for energy efficient home construction. The program has reduced the company's peak demand by 147 mw, the equivalent to replacing two combustion turbines, which is enough capacity to power about 40,000 homes during the peak period of electric demand. Continued promotion of Good Cents homes is expected to reduce peak demand by a total of 239 mw in year 2000.

b. Installing capacitors at customer service substations as part of an EC/DSM program may improve power factor and energy efficiency. Some customer systems may benefit from receiving service at higher voltages, to reduce line losses and transformation losses. Removing tariff provisions like "demand ratchets" tends to increase incentives to reduce excessive on-peak demands over time. Demand (kw) ratchets remove much of the "dollar" incentive of some energy (kwh) conservation efforts, too. Once a new peak demand (kw) is hit on a two part tariff structure; the incentive (in dollars) to control peak, up to that level (kw) is reduced and tends to reduce the "dollar" impact of energy conservation on billings.

c. Interruptible Service Rate (IS) was designed to serve as an alternative to the addition of peaking capacity by providing incentives to customers to interrupt their loads during peak conditions. The incentive or credit will depend upon a number of customer factors such as load factor, hours of interruption, and frequency of interruption. The maximum credit is based upon the value of avoided combustion turbine capacity. This is more appropriate to natural gas supplies or systems.

d. Residential Off-Peak Water Heating Rate provides electric hot water to customers without contributing to the peak through the use of a time-controlled electric hot water heater and large storage tank. The rate serves to shift water heating load to an off-peak period and lowers average fuel costs.

e. Residential Conservation Rate (RC) is designed to encourage high insulation levels and high air conditioning efficiency in new single family homes. For original home owners who meet the specified, thermal efficiency requirements, monthly energy use over 650 KWH is discounted yearly for up to five years. This rate serves to promote conservation and load management.

f. Cool Storage is a technology in which water is cooled or frozen at night for use the next day for cooling buildings. It is a load shaping application which shifts loads to an off peak period. From the customer's view, cool storage appears to be economical because the company's nonresidential rate structure provides an attractive incentive for customers to control their peak demands.

g. Large facilities may be able to curtail demand by using self-generation, cogeneration, independent power producers, or other short term alternative supplies of power to reduce on-peak demand. "Wheeling" of off-system power would enhance these options during periods of curtailment or interruption. Some type of "open access wheeling" may enhance the use of the utility's existing transmission system. Defense installations may be able to receive "wheeled" power under an EC/DSM program.

GLOSSARY

Abbreviations

ADUSD(CI)	Assistant Deputy Under Secretary of Defense (Conservation & Installations)
DDSMS	Defense Demand Side Management Subcommittee
DEPC	Defense Energy Policy Council
DEPPM	Defense Energy Program Policy Memorandum
DFSC	Defense Fuel Supply Center
DoD	Department of Defense
DUECC	Defense Utilities Energy Coordinating Council
EC/DSM	Energy Conservation/Demand Side Management
MACOM/MAJCOM	Major Command
O&M	Operation and Maintenance
POC	Point of Contact
PSC	Public Service Commission
SES	Shared Energy Savings
TCX	Technical Center of Expertise
TPC	Third Party Contracting
USAEDH	U.S. Army Engineer Division, Huntsville
U.S.C.	United States Code